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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

The diagram illustrates the architecture of the proposed system, divided into two main sections: the Host Computer and the Mobile Device.

Host Computer Section:

- AD Converter:** Connected to the External I/O Interface Controller.
- External I/O Interface Controller:** Acts as the central interface for the Host Computer, connected to the AD Converter, Digital I/O, and Serial Interface.
- Digital I/O:** Connected to the External I/O Interface Controller.
- Analog Outputs:** Connected to the External I/O Interface Controller.
- Analog Inputs:** Connected to the External I/O Interface Controller.
- Analog-to-Digital Converter:** Connected to the External I/O Interface Controller.
- Digital-to-Analog Converter:** Connected to the External I/O Interface Controller.
- Serial Interface:** Connected to the External I/O Interface Controller and the Mobile Device.

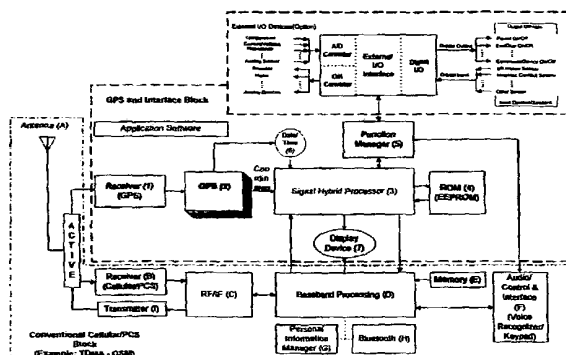
Mobile Device Section:

- Function Manager (3):** The central control unit for the Mobile Device, connected to the ROM (4), Digital Device (7), Analog Processing (8), and Analog Control & Interface (11).
- ROM (4) (EEPROM):** Connected to the Function Manager (3).
- Digital Device (7):** Connected to the Function Manager (3).
- Analog Processing (8):** Connected to the Function Manager (3).
- Analog-to-Digital Converter (9):** Connected to the Analog Processing (8).
- Digital-to-Analog Converter (10):** Connected to the Analog Processing (8).
- Analog Control & Interface (11) (Voice Recognition/Keyboard):** Connected to the Function Manager (3).

The Host Computer and Mobile Device are connected via a **Serial Interface**.

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(54) Title: HYBRID METHOD AND SYSTEM OF THE IMPROVED BIDIRECTIONAL GPS AND CELLULAR/PCS



(S7) Abstract: The purpose of the invention is to maximize and to optimize an intelligent and multipurpose functions for network by using a hybrid method, supplementing a re-transmission function, of improved bidirectional GPS (Global Positioning System) with the existing Cellular/PCS (Personal Communications Services). The invention, a hybrid method of combining Cellular/PCS and improved bidirectional GPS, manipulates as follows: GPS signals can be used independently, received from a Receiver (1) through a GPS (2) by using data stored on EEPROM (Electrically Erasable Programmable Read Only Memory) (4) via a Signal Hybrid Processor (3); an External I/O Interface (8) can retransmit time marked, status and operations and Function Manager (5) can also re-transmit various states of the PCS (Event Marking) as well as coordinate signals connected to Cellular/PCS network; Coordinates of User (a) are transferred Transmitter (I) and Antenna (A) and can call to user (b) simultaneously; In this case, coordinates of User (a) are converted to ASCII codes in DB (Data Base) of station, and display into User (b) with Use (a) ID (Identification) and real locations like address (street name and so on), such a way that shows as following. Receiver (B) → RF (Radio Frequency)/IF (Intermediate Frequency) (C) → Baseband Processor (D) → Display Device (7). This Hybrid Method implements a data base from acquired data on network for various intelligent functions.

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